## **Claims**

## What is claimed is:

- 1 1. A system for generating a report by a reporting tool of a SAP business information system
- 2 using data included within an Aspect file, said system comprising a non-SAP bridge program
- 3 adapted to generate the Aspect file through use of data derived from a dataset and to transmit the
- 4 Aspect file to the SAP business information system.

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- 2. The system of claim 1, wherein the dataset is a non-SAP-formatted dataset.
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- 1 (3) 3. The system of claim 1, wherein the dataset is a SAP-formatted dataset.
- 1 4. The system of claim 1, wherein the SAP business information system comprises an SAP
- 2 Executive Information System (EIS).

- 5. A system for generating a report by a reporting tool of a SAP business information system
- 2 using data included within an Aspect file having rollup records, said system comprising a non-
- 3 SAP bridge program adapted to generate the Aspect file through use of data derived from a
- 4 dataset and to transmit the Aspect file to the SAP business information system, said dataset
- 5 having a keygroup, wherein to generate the Aspect file includes to roll up a portion of the dataset
- 6 with respect to the keygroup, wherein each rollup record has a rollup field and a quantity field,
- 7 wherein the rollup field stores a rollup keyvalue of the keygroup, and wherein the quantity field
- stores the number of dataset records that have the same rollup keyvalue.
  - 6. The system of claim 5, wherein the bridge program is further adapted to cause the rollup
- 2 records in the generated Aspect file to be sorted with respect to the keygroup.
- 7. The system of claim 5, wherein the dataset is a non-SAP-formatted dataset.
- 1 8. The system of claim 5, wherein the dataset is a SAP-formatted dataset.
- 9. The system of claim 5, wherein the bridge program is further adapted to generate a trace file
- 2 that includes a representative rollup keyvalue of the keygroup and a pointer that points to a
- portion of the dataset, said portion being correlated with the representative rollup keyvalue.

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- 1 10. The system of claim 5, wherein the SAP business information system comprises an SAP
- 2 Executive Information System (EIS).
- 1 11. The system of claim 5, wherein the bridge program is further adapted to identify select
- 2 records of the dataset in accordance with at least one selection rule applied to the dataset, and
- wherein the portion of the dataset includes the select records so identified.
- 1 12. The system of claim 11, wherein to identify the select records includes to accept as input a

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  5 selection rules do not permit identifying as a select record any record of the dataset having an

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  effective date that is earlier than the first date or later than the second date.
- 1 (1) 13. The system of claim 5, wherein the dataset is selected from the group consisting of a table, a spreadsheet, and a combination thereof.
- 1 14. The system of claim 5, wherein the report relates to procurement data, and wherein the rollup records include the procurement data.
- 1 15. The system of claim 14, wherein the procurement data is selected from the group consisting of purchase order data, invoice data, and a combination thereof.

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- 1 16. A system for generating a report by a reporting tool of a SAP business information system
- 2 using and combining data included within N Aspect files A<sub>1</sub>, A<sub>2</sub>, ..., A<sub>N</sub> respectively having
- rollup records [R]<sub>1</sub>, [R]<sub>2</sub>, ..., [R]<sub>N</sub>, said N at least 2, said system comprising at least one non-SAP
- 4 bridge program adapted to respectively generate the N Aspect files through use of data derived
- from select records  $[S]_1$ ,  $[S]_2$ , ...,  $[S]_N$  of N datasets  $D_1$ ,  $D_2$ , ...,  $D_N$ , respectively, and to transmit
- 6 the N Aspect files to the SAP business information system, said select records [S]<sub>1</sub>, [S]<sub>2</sub>, ..., [S]<sub>N</sub>
- having a common keygroup, wherein to generate the N Aspect files comprises, for i = 1, 2, ...,
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- 9 to identify the select records [S]<sub>i</sub> in accordance with selection rules applied to D<sub>i</sub>; and
- to roll up the select records [S]<sub>i</sub> with respect to the common keygroup, wherein the rollup
- 11 records [R]<sub>i</sub> corresponding to [S]<sub>i</sub> have a rollup field and a quantity field, wherein the rollup field
- 12 stores a rollup keyvalue of the select records [S], and wherein the quantity field stores the
- 13  $\mathbb{S}_i$  number of select records of  $[S]_i$  that have the same rollup keyvalue.
- 1 17. The system of claim 16, wherein a first dataset of the N datasets is a non-SAP-formatted
- dataset.
- 1 18. The system of claim 16, wherein a first dataset of the N datasets is a SAP-formatted dataset.
- 1 19. The system of claim 16, wherein a first dataset of the N datasets and a second dataset of the N
- 2 datasets have different formats.

- 1 20. The system of claim 16, wherein the datasets  $D_1$ ,  $D_2$ , ...,  $D_N$  have formats  $F_1$ ,  $F_2$ , ...,  $F_N$ ,
- 2 respectively, wherein the at least one bridge program comprises N bridge programs P<sub>1</sub>, P<sub>2</sub>, ..., P<sub>N</sub>
- respectively keyed to the formats  $F_1$ ,  $F_2$ , ...,  $F_N$  for respectively generating the Aspect files  $A_1$ ,  $A_2$ ,
- 4 ...,  $A_N$ .

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- 1 21. The system of claim 16, wherein the datasets  $D_1$ ,  $D_2$ , ...,  $D_N$  have formats  $F_1$ ,  $F_2$ , ...,  $F_N$ ,
- 2 respectively, and wherein the at least one bridge program consists of one bridge program having
- logical paths  $L_1$ ,  $L_2$ , ...,  $L_N$  respectively keyed to the formats  $F_1$ ,  $F_2$ , ...,  $F_N$  for respectively
- 4  $\frac{1}{4}$  generating the Aspect files  $A_1, A_2, ..., A_N$ .
- 1 22. The system of claim 16, wherein the selection rules are the same for each of the N datasets.
- 1 (3) 23. The system of claim 16, wherein the SAP business information system comprises an SAP 2 (5) Executive Information System (EIS).
- 1 24. The system of claim 16, wherein the report relates to procurement data, and wherein the
- 2 rollup records  $[R]_1$ ,  $[R]_2$ , ...,  $[R]_N$  include the procurement data.
- 1 25. The system of claim 24, wherein the procurement data is selected from the group consisting
- 2 of purchase order data, invoice data, and a combination thereof.

26. A method for generating a report by a reporting tool of a SAP business information system 1 2 using data included within an Aspect file, said method comprising executing a non-SAP bridge 3 program, said executing including: generating the Aspect file through use of data derived from a dataset; and 4 5 transmitting the Aspect file to the SAP business information system. 27. The method of claim 26, wherein the dataset is a non-SAP-formatted dataset. 1 28. The method of claim 26, wherein the dataset is a SAP-formatted dataset. ١Į 29. The method of claim 26, wherein the SAP business information system comprises an SAP

Executive Information System (EIS).

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30. A method for generating a report by a reporting tool of a SAP business information system
 using data included within an Aspect file having rollup records, said method comprising:

providing a dataset having a keygroup; and

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executing a non-SAP bridge program, including generating the Aspect file, said generating comprising rolling up a portion of the dataset with respect to the keygroup, wherein each rollup record has a rollup field and a quantity field, wherein the rollup field stores a rollup keyvalue of the keygroup, and wherein the quantity field stores the number of dataset records that have the same rollup keyvalue.

- 31. The method of claim 30, wherein generating the Aspect file includes causing the rollup records in the generated Aspect file to be sorted with respect to the keygroup.
- 32. The method of claim 30, wherein the dataset is a non-SAP-formatted dataset.
- 33. The method of claim 30, wherein the dataset is a SAP-formatted dataset.
- 1 34. The method of claim 30, further comprising generating a trace file that includes a
- 2 representative rollup keyvalue of the keygroup and a pointer that points to a portion of the
- dataset, said portion being correlated with the representative rollup keyvalue.

- 1 35. The method of claim 30, wherein the SAP business information system comprises an SAP
- 2 Executive Information System (EIS).
- 1 36. The method of claim 30, further comprising identifying select records of the dataset in
- 2 accordance with at least one selection rule applied to the dataset, said portion of the dataset
- 3 including the select records so identified.
- 1 37. The method of claim 36, said identifying including accepting as input a first date and a
- 2 (ii) second date, said first date earlier than said second date, said selection rules not permitting said
- 3 identifying to identity as a select record any record of the dataset having an effective date that is
- 4 earlier than the first date or later than the second date.
- 1 38. The method of claim 30, wherein the dataset is selected from the group consisting of a table,
- 2 iii a spreadsheet, and a combination thereof.

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- 1 39. The method of claim 30, wherein the report relates to procurement data, and wherein the
- 2 rollup records include the procurement data.
- 1 40. The method of claim 39, wherein the procurement data is selected from the group consisting
- 2 of purchase order data, invoice data, and a combination thereof.

- 41. The method of claim 30, further comprising:
   transmitting the Aspect file to the SAP by
- 2 transmitting the Aspect file to the SAP business information system where the Aspect file
- 3 becomes a Temp file having the rollup records;
- 4 making a query to sum over the quantity field for a subset of the rollup records of the
- 5 Temp file, wherein the subset is determined by the query, and wherein the query is adapted to
- 6 being executed by a SAP module in the SAP computing environment; and
- 7 executing the query by the SAP module including returning a result of the query.

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- 1 42. A method for generating a report by a reporting tool of a SAP business information system
- 2 using and combining data included within N Aspect files A<sub>1</sub>, A<sub>2</sub>, ..., A<sub>N</sub> respectively having
- rollup records [R]<sub>1</sub>, [R]<sub>2</sub>, ..., [R]<sub>N</sub>, said N at least 2, said method comprising providing N datasets
- 4  $D_1, D_2, ..., D_N$  having a common keygroup, and for i = 1, 2, ..., and N executing a non-SAP
- 5 bridge program, including:
- 6 identifying select records [S]<sub>i</sub> of the dataset D<sub>i</sub>, said identifying in accordance with
- 7 selection rules applied to D<sub>i</sub>; and
- 8 rolling up the select records [S]<sub>i</sub> with respect to the common keygroup, wherein the rollup
- 9 \( \text{ii} \) records [R]<sub>i</sub> corresponding to [S]<sub>i</sub> have a rollup field and a quantity field, wherein the rollup field
- stores a rollup keyvalue of the select records [S]<sub>i</sub>, and wherein the quantity field stores the
- 11  $\frac{1}{2}$  number of select records of  $[S]_i$  that have the same rollup keyvalue.
  - 43. The method of claim 42, wherein a first dataset of the N datasets is a non-SAP-formatted
- 2 dataset.

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- 1 44. The method of claim 42, wherein a first dataset of the N datasets is a SAP-formatted dataset.
- 1 45. The method of claim 42, wherein a first dataset of the N datasets and a second dataset of the
- 2 N datasets have different formats.

- 1 46. The method of claim 42, wherein the datasets  $D_1$ ,  $D_2$ , ...,  $D_N$  have formats  $F_1$ ,  $F_2$ , ...,  $F_N$ ,
- 2 respectively, wherein the at least one bridge program comprises N bridge programs P<sub>1</sub>, P<sub>2</sub>, ..., P<sub>N</sub>
- respectively keyed to the formats  $F_1$ ,  $F_2$ , ...,  $F_N$  for respectively generating the Aspect files  $A_1$ ,  $A_2$ ,
- 4 ..., A<sub>N</sub>.

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- 1 47. The method of claim 42, wherein the datasets  $D_1$ ,  $D_2$ , ...,  $D_N$  have formats  $F_1$ ,  $F_2$ , ...,  $F_N$ ,
- 2 respectively, and wherein the at least one bridge program consists of one bridge program having
- logical paths  $L_1$ ,  $L_2$ , ...,  $L_N$  respectively keyed to the formats  $F_1$ ,  $F_2$ , ...,  $F_N$  for respectively
- 1 48. The method of claim 42, wherein the selection rules are the same for each of the N datasets.
- 49. The method of claim 42, wherein the SAP business information system comprises an SAP

  Executive Information System (EIS).
- 1 50. The method of claim 42, wherein the report relates to procurement data, and wherein the
- 2 rollup records  $[R]_1$ ,  $[R]_2$ , ...,  $[R]_N$  include the procurement data.
- 1 51. The method of claim 50, wherein the procurement data is selected from the group consisting
- 2 of purchase order data, invoice data, and a combination thereof.

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52. The method of claim 42, wherein processing the Aspect file A<sub>i</sub> further includes transmitting the Aspect file A<sub>i</sub> to the SAP business information system where the Aspect file A<sub>i</sub> becomes a Temp file T<sub>i</sub> having the rollup records [R]<sub>i</sub>, and wherein the method further comprises:

making a query to sum over the quantity field for a subset of the rollup records of the N

Temp files in composite, wherein the subset is determined by the query, and wherein the query is adapted to being executed by a SAP module in the SAP computing environment; and

executing the query by the SAP module including returning a result of the query.

- 1 53. A computer program product, comprising a computer usable medium having a computer
- 2 readable program code embodied therein for generating a report by a reporting tool of a SAP
- 3 business information system using data included within an Aspect file, said program code
- 4 comprising a non-SAP bridge program adapted to generate the Aspect file through use of data
- derived from a dataset and to transmit the Aspect file to the SAP business information system.

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54. A computer program product, comprising a computer usable medium having a computer readable program code embodied therein for generating a report by a reporting tool of a SAP business information system using data included within an Aspect file having rollup records, said program code comprising a non-SAP bridge program adapted to generate the Aspect file through use of data derived from a dataset and to transmit the Aspect file to the SAP business information system, said dataset having a keygroup, wherein to generate the Aspect file includes to roll up a portion of the dataset with respect to the keygroup, wherein each rollup record has a rollup field and a quantity field, wherein the rollup field stores a rollup keyvalue of the keygroup, and wherein the quantity field stores the number of dataset records that have the same rollup

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1 55. A computer program product, comprising a computer usable medium having a computer 2 readable program code embodied therein for generating a report by a reporting tool of a SAP 3 business information system using and combining data included within N Aspect files A<sub>1</sub>, A<sub>2</sub>, ..., A<sub>N</sub> respectively having rollup records [R]<sub>1</sub>, [R]<sub>2</sub>, ..., [R]<sub>N</sub>, said N at least 2, said program code 4 5 comprising at least one non-SAP bridge program adapted to respectively generate the N Aspect 6 files through use of data derived from select records [S]<sub>1</sub>, [S]<sub>2</sub>, ..., [S]<sub>N</sub> of N datasets D<sub>1</sub>, D<sub>2</sub>, ..., 7 D<sub>N</sub>, respectively, and to transmit the N Aspect files to the SAP business information system, said 8 select records [S]<sub>1</sub>, [S]<sub>2</sub>, ..., [S]<sub>N</sub> having a common keygroup, wherein to generate the N Aspect 9 🗓 files comprises, for i = 1, 2, ..., and N: -[] 10 to identify the select records [S]<sub>i</sub> in accordance with selection rules applied to D<sub>i</sub>; and 11 to roll up the select records [S]i with respect to the common keygroup, wherein the rollup 12 (1) records [R], corresponding to [S], have a rollup field and a quantity field, wherein the rollup field 13 📆 stores a rollup keyvalue of the select records [S], and wherein the quantity field stores the 14 [] number of select records of [S], that have the same rollup keyvalue.